## INTERNATIONAL SEARCH REPORT

nal Application No PCT/JP2004/005283

A. CLA	SSIFIC	ATION	OF	SUBJE	CT MATT	ER
IPC	7	H05k	(3/	12	CT MATT	

According to International Patent Classification (IPC) or to both national classification and IPC

## **B. FIELDS SEARCHED**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Etectronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X .	US 6 306 204 B1 (LIN JOHN WEI-PING) 23 October 2001 (2001-10-23)  Claims 1,3,8,10	1-3,6, 10-13, 15,18,22
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13, 30 November 1998 (1998-11-30) & JP 10 204350 A (SEIKO EPSON CORP), 4 August 1998 (1998-08-04) abstract	1–27
A	US 2002/151161 A1 (FURUSAWA MASAHIRO) 17 October 2002 (2002-10-17) the whole document	1-27

A Soliting definition of box o.	X Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>'A' document defining the general state of the art which is not considered to be of particular relevance</li> <li>'E' earlier document but published on or after the international filing date</li> <li>'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>'O' document referring to an oral disclosure, use, exhibition or other means</li> <li>'P' document published prior to the international filing date but later than the priority date claimed</li> </ul>	<ul> <li>"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search  12 August 2004	Date of mailing of the international search report 23/08/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Batev, P

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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	PCT/JP2004/005283
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A	EP 1 139 455 A (SEIKO EPSON CORP) 4 October 2001 (2001-10-04) paragraphs '0018! - '0021!, '0048! - '0061!	1-27
4	US 2002/041302 A1 (SEKI SHUNICHI ET AL) 11 April 2002 (2002-04-11) the whole document	
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